



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,288	05/25/2001	Mamoru Ueda	450100-03378	4611

20999 7590 09/21/2005

FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER

SHIBRU, HELEN

ART UNIT	PAPER NUMBER
----------	--------------

2616

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,288

Applicant(s)

UEDA, MAMORU

Examiner

SHIBRU HELEN

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>01/08/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

2. Figures 1-17 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 4, 6, 8, 10, 12-13, 15-17, 19, 21, 23-24, and 26-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Ngai (US Pat. No. 6,263,023).

Regarding claim 1, Ngai discloses a decoding apparatus for decoding a coded stream, comprising:

input means (input (22) in fig. 1) for inputting a speeded-up coded stream (see col. 3 line 66- col.4 lines 19, it is inherent that the video data from the DVD drive are speeded-up to accept the data at the requested rate and the memory (14) stores the data at the rate at which it is received. The received rate varies i.e one rate is higher or lower than the other one. See also col. 5 lines 27-30. The size of the FIFO depends on the speed of the incoming data);
a plurality of decoding means (see slice decoder (16) in fig. 1) for decoding said speeded-up coded stream (see col. 4 lines 28-32);
decoding control means (see fig. 1 stream slicer (18)) for controlling said plurality of decoding means such that said plurality of decoding means operate in parallel (see col. 4 lines 32-44 and connection (28) in fig. 1); and
output control means (see fig. 1 synchronizer (20)) for outputting, at an arbitrary playback speed, a picture corresponding to said speeded-up coded stream decoded by said plurality of decoding means (see col. 4 lines 48-55).

Regarding claim 2, Ngai discloses speeded-up coded stream is an MPEG-2 video bit stream having a bit rate increased by a predetermined factor (see col. 4 lines 5-19 and col. 5 lines 27-3. it is inherent that the rate has an original factor which is increased by a predetermined factor).

Regarding claim 4, Ngai discloses decoding means outputs a signal indicating completion of decoding to said decoding control means (see col. 5 lines 10-19), and

said decoding control means controls said decoding means which has output said signal indicating the completion of decoding such that said decoding means decodes another coded stream (see col. 5 lines 19-26).

Regarding claim 6, Ngai discloses selection means (see fig. 2 busy (68) and busy circuit (56)) for selecting a particular one of a plurality of picture data decoded and output by said plurality of decoding means (see col. 5 lines 10-19); and compensation (see motion compensation (52) in fig. 2) means which receives the picture data selected by said selection means and performs motion compensation, as required, upon the received picture data (see col. 4 lines 65-col. 5 line 5).

Regarding claim 8, Ngai discloses storage means (frame buffer (50)) for said selection means or motion compensation performed by said motion compensation means (see col. 4 line 65- col. 5 line 5); and storage control means (processor (96)) for controlling the storage, in said storage means, of said picture data selected by said selection means or said picture data subjected to motion compensation performed by said motion compensation means (see col. 5 lines 3-5 and 39-43 it is inherent that frame buffer (50) is controlled by stream processor (96) in conjunction with slice address allocator (98) and busy signal (68)).

Claims 10, 12-13, 15, 24, and 26-27 are rejected for the same reason as discussed in claim 1 above.

Claim 16 is rejected for the same reason as discussed in claim 2 above.

Claim 17 is rejected for the same reason as discussed in claim 4 above.

Claim 19 is rejected for the same reason as discussed in claim 6 above.

Claim 21 is rejected for the same reason as discussed in claim 8 above.

Regarding claim 23, Ngai discloses acceptance means for accepting a multiplexed stream on which said plurality of coded streams are multiplexed (see col. 4 lines 12-14); and supply means for separating said multiplexed stream into the plurality of coded streams and supplying said plurality of coded streams to said input means (see col. 3 line 65-col. 4 line 15).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai in view of Akiwumi-Assani (US Pat. No. 5,532,744).

Claim 5 differ from Ngai in that the claim further requires first buffer means for buffering said coded stream; reading means for reading from said coded stream a start code indicating the start of a predetermined unit of information included in said coded stream and further reading position information indicating a location in said buffer means at which said start code is stored; second buffering means for buffering said start code and said position information read by said reading means; and buffering control means for controlling buffering of said coded stream by said first buffering means and buffering of said start code and said position information by said second buffering means. However Ngai discloses first buffer means(see fig. 1 memory (14)) for buffering said coded stream (see col. 4 lines 14-19). Ngai also teaches the start address

allocated the address of the slices and a data stream is route to a start code detector (92 in fig. 3 and see col. 5 lines 31-35).

In the same field of endeavor Akiwumi-Assani discloses first buffer means (rate buffer (20) in fig. 1) for buffering said coded stream (see col. 4 lines 55-58, col. 5 lines 24-32); reading means (system controller (24) in fig. 1) for reading from said coded stream (see col. 4 lines 55-58) a start code indicating the start of a predetermined unit of information (see col. 4 line 66-col. 5 line 7) included in said coded stream and further reading position information indicating a location in said buffer means at which said start code is stored (see col. 5 line 7-12 and 20-24); second buffering means (decoder module (12) in fig. 1) for buffering said start code and said position information read by said reading means (see col. 4 lines 16-20, col. 5 lines 13-15, 33-38 and 49-65, the start code information is route to the decoder module (12) which comprises buffer); and buffering control (see system controller (24) in fig. 1) for controlling buffering of said coded stream by said first buffering means (see col. 5 lines 30-32) and buffering of said start code and said position information by said second buffering means (see col. 5 lines 7-15 and line 66-col. 6 line 5). Therefore in light of the teaching from Akiwumi-Assani it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ngai by having a coded stream unit in order to indicate the beginning of each portion of the picture area.

Claim 18 is rejected for the same reason as discussed in claim 5 above.

7. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai in view of Phillips (US Pat. No. 5, 510, 842).

Regarding claim 9, claim 9 is differ from Ngai in that the claim further requires storage means stores a luminance component and a color difference component of said picture data

Art Unit: 2616

separately from each other. Although Ngai does not disclose storage means stores a luminance component and a color difference component of said picture data separately from each other, Ngai discloses high level symbols can be sent to the slice decoders (see col. 5 lines 42-53).

In the same field of endeavor Phillips discloses each macroblocks of pixel values includes luminescence and color signals (see col. 6 lines 56-65). Phillips further discloses the interpolation filter expands the image to fit the aspect ratio (see col. 7 lines 14-26). Phillips further discloses the output signals are luminescence and color difference signal (see col. 10 line 66- col. 11 line 5). Therefore in light of the teaching in Phillips it would have been obvious to modify Ngai by storing a luminescence component and a color difference component in order to produce different samples on the receiver's display device.

Claim 22 is rejected for the same reason as discussed in claim 9 above.

8. Claims 3, 7, 11, 14, 20, 25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai.

Regarding claim 3, although Ngai does not specifically disclose output control means outputs a picture corresponding to said MPEG-2 video bit stream having the bit rate increased by the predetermined factor, at a playback speed increased by a factor within the range from zero to a predetermined value, Ngai discloses output control means (see fig. 1 synchronizer (20)) outputs a picture corresponding to said MPEG-2 video bit stream having the bit rate increased by the predetermined factor (see col. 4 lines 5-19 and/or claim rejection 2 above). Official Notice is given that it is well known in the art to increase the play back speed (trick play) to a predetermined factor. Therefore it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify Ngai by providing a playback speed increased by a factor within the range from zero to a predetermined value in order to traverse the data.

Regarding claim 7, although Ngai does not specifically teach when values stored in said storage means all become equal to a first value, a value stored therein corresponding to decoding means outputting said end signal indicating completion of decoding is changed from said first value to a second value, one of picture data decoded by said first decoding means corresponding to the second value stored in said storage means is selected, and the values, stored in said storage means, corresponding to said decoding means which has decoded said selected picture data is changed to said first value, Ngai does disclose plurality of decoding means for outputting an end signal indicating completion of decoding to said selection means (see col. 5 lines 10-13). Ngai further discloses selection means includes storage means for storing a value corresponding to a processing state of each of said plurality of decoding means such that (see col. 4 line 65-col.5 line 5). Ngai further discloses when all units are completed their portion of decoding the busy signal is deactivated (the original value is changed) (see col.5 lines 11-14). Official Notice is given that it is well known in the art to change first value to a second value when selected picture data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the decoding means of Ngai in order for the slice decoder to request another slice.

Claim 20 is rejected for the same reason as discussed in claim 7 above.

Regarding claims 11, 14, 25 and 28 the limitations in claims 11, 14, 25 and 28 can be found in the apparatus claim 1. However claims 11, 14, 25 and 28 further require a recording medium storing a computer readable program for decoding a coded stream to execute steps as

Art Unit: 2616

claimed in claim 1. Official notice is taken that it is well known in the art to embody inventions in software to be executed by a computer. Therefore, it would have been obvious to one of ordinary skill in the art to modify the teaching of Ngai by having a record medium capable of being read by a computer tangibly embodying a program causing the computer to execute the steps of the apparatus claim. The motivation for having a recordable by a computer is that such a method can be easily enhanced and executed multiple times.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHIBRU HELEN whose telephone number is (571) 272-7329.

The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary, NGOC Y. VU can be reached on 571 272 7329. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helen Shibru
9/19/05


NGOC-YEN VU
PRIMARY EXAMINER